Iowa Department of Transportation

SPECIAL PROVISIONS FOR NYLOPLAST DRAIN BASIN

STORY County STP-U-0155(688)--70-85

Effective Date January 21, 2015

THE STANDARD SPECIFICATIONS, SERIES 2012, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

PART 1 -- GENERAL

1.1 SUMMARY

A. Section Includes:

- 1. All labor, materials, equipment, and supervision required to furnish and install the Nyloplast Drain Basin complete as shown on the plan sheets.
- 2. The material and work specified in this section includes: Nyloplast Drain Basin with Ductile Iron Drop-in Dome Grate

1.2 SUBMITTALS

- A. Shop Drawings of Nyloplast Drain Basins according to Iowa DOT Article 1105.03 of the Standard Specifications.
- B. Catalog Cuts of Ductile Iron Drop-in Dome Grate.
- C. Gradation and soil classification reports for structure bedding and backfill materials.

1.3 DELIVERY, STORAGE, AND HANDLING

A. Follow the aggregate storage requirements in Iowa DOT Article 2301.02, C of the Standard Specifications

1.4 MEASURMENT AND PAYMENT

- A. Measurement: Each type and size of Nyloplast Drain Basin will be counted
- B. Payment: Payment will be made per each at the unit price.
- C. Includes: Unit price includes, but not limited to, Nyloplast Drain Basin, drop-in dome grate, excavation, furnishing bedding material, placing bedding and backfill material, compaction, base, inverts, pipe connections, and any adjustments.

1.5 QUALITY ASSURANCE

A. Codes and Standards: Perform work in accordance with applicable requirements of the lowa DOT Standard Specifications for Highway and Bridge Construction, Series 2012, and all local and state codes and ordinances.

PART 2 -- PRODUCTS

2.1 NYLOPLAST DRAIN BASIN

A. 12 inch diameter Nyloplast Drain Basin

2.2 CASTINGS

- A. Ductile Iron Drop-in Dome Grate to match basin O.D.
 - 1. Ductile Iron per ASTM A536 Grade 70-50-05

2.3 EXCAVATION AND BACKFILL MATERIAL

A. Excavate according to Iowa DOT Section 2552 of the Standard Specifications

PART 3 -- EXECUTION

3.1 GENERAL REQUIREMENTS FOR INSTALLATION OF NYLOPLAST DRAIN BASIN

A. Subgrade Preparation

- 1. Cut Sections: Prepare subgrade to accurate elevation required to place structure base and subbase material.
- 2. Fill Sections: Compact to 95% of maximum Standard Proctor Density and hand grade to accurate elevation required to place structure base or subbase, or install stabilization material as directed by the Engineer.

B. Subbase:

1. Install 8 inch thick pad of Class 1 bedding material a minimum of 12 inches outside footprint of the structure.

C. Installation of Drain Basin

- 1. Place base with integral riser section and ensure proper vertical and horizontal alignment.
- D. Pipes: Install and bed pipes and connect to drain basin. Install pipe and inlet and outlet adapters as per manufactures recommendations.

E. Joint Sealant:

1. Install rubber rope gasket for watertight joints

F. Invert:

1. Use inlet and outlet adapters that match basin and subdrain types as per plans

G. Top Section:

1. Install ductile Iron Drop-in Dome Grate matching the basins O.D.

H. Backfill and Compaction

- 1. Place suitable backfill material simultaneously on all sides of walls and structures so the fill is kept at approximately the same elevation at all times
- 2. Compact the 3 feet closest to all walls using pneumatic or hand tampers only. Ensure proper and uniform compaction of backfill around structure.

3.2 CLEANING, INSPECTING, TESTING

- A. Clean all structures by removing sheeting, bracing, shoring, forms, soil sediment, concrete waste, and other debris.
- B. Do not discharge sediment or debris to drainage channels, existing storm sewer, or existing sanitary sewer system.